

2.7 Hazards and Hazardous Materials

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
HAZARDS AND HAZARDOUS MATERIALS				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.7.1 Setting

Materials and waste may be considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode or generate vapors when mixed with water (reactivity). The term “hazardous material” is defined in law as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.¹ In some cases, past industrial or commercial uses on a site can result in spills or leaks of hazardous materials and petroleum to the ground, resulting in soil and groundwater contamination. Federal and state laws require that soils having concentrations of contaminants such as lead, gasoline, or industrial solvents that are higher than certain acceptable levels must be

¹ State of California, Health and Safety Code, Chapter 6.95, Section 25501(o).

handled and disposed as hazardous waste during excavation, transportation, and disposal. The California Code of Regulations (CCR), Title 22, Section 66261.20-24 contains technical descriptions of characteristics that would cause a soil to be classified as a hazardous waste. The use of hazardous materials and disposal of hazardous wastes are subject to numerous laws and regulations at all levels of government.

In addition to toxic substances, the CPUC generally provides information about Electric and Magnetic Fields (EMF) in its environmental documents, including this Initial Study, to inform the public and decision makers; however, it does not consider EMF in the context of CEQA as an environmental impact because there is no agreement among scientists that EMF creates a potential health risk and because CEQA does not define or adopt standards for defining any potential risk from EMF. For a detailed analysis of EMF for informational purposes, refer to Section 1.10 of the Project Description and **Appendix B**.

Existing Environment

Existing Contamination

For the purposes of this Initial Study analysis, ESA retained Environmental Data Resources (EDR) of Southport, Connecticut to conduct a regulatory database search of sites adjacent to and in the vicinity of the project area that are listed on agency files for the documented use, storage, generation, or releases of hazardous materials or petroleum products. The database search process reviews several lists generated by federal, state, county, and/or city regulatory agencies for historically contaminated properties, and for businesses that use, generate, or dispose of hazardous materials or petroleum products in their operation. In addition, the database search reviews lists of active contaminated sites that are currently undergoing monitoring and remediation. The databases searched and reviewed by EDR for this project are listed in **Table 2.7-1**.²

The listed sites within one mile of the proposed transmission line alignment and the substations provided in **Table 2.7-2** have experienced a release of hazardous materials or petroleum products that have resulted in contamination of soil and/or groundwater. Sites located along and adjacent to the project are of greatest concern. Sites located within 1,000 feet of the project site may pose a risk of contamination since some contaminants, such as methyl tertiary butyl ether (MTBE) is known to travel through groundwater up to 1,000 feet. Those sites located at a distance of 1,000 feet or more pose a lower risk of contaminating the soils and groundwater beneath the project alignment and substations.

Figure 2.7-1 shows the locations of the listed sites along and within 1,000 feet of the project route that have had a release of hazardous materials or petroleum products that may result in the encounter of contaminated soil or groundwater during project construction.

² Potential sites of past historic hazardous materials use, storage, and/or contamination may have occurred prior to the activation of agency maintained databases.

**TABLE 2.7-1
REGULATORY AGENCY DATABASES ACCESSED**

Database	Type of Record	Agency
NPL	National Priority List	EPA
CORRACTS	RCRA Corrective Actions	EPA
CERCLIS/ NFRAP	Sites currently or formerly under review by the EPA	EPA
RCRIS-TSD	RCRA permitted treatment, storage, disposal facilities	EPA
RCRIS-GEN	RCRA registered small or large generators of hazardous waste	EPA
RAATS	RCRA violations/ enforcement actions	EPA
FINDS	Facility information and "pointers" to other sources that contain more detail	EPA
ERNS	Emergency Response Notification System of Spills	EPA
HMIRS	Hazardous Material Spill Incidents Reports	U.S. Department of Transportation
MINES	Mines Master Index Database	U.S. Dept. of Labor, Mine Safety and Health Administration
MLTS	List of sites which possess or use radioactive materials and are subject to NRC licensing requirements	U.S. Nuclear Regulatory Commission
TRIS/TSCA	Facilities which release toxic chemicals to air, water and land/Facilities that manufacture or import chemical substances	EPA
PADS	Generators, Transporters, Commercial Storers of PCBs	EPA
CAL-SITES	Potential or confirmed hazardous substance release sites	STATE
AWP	Known hazardous waste sites	STATE
LUST	Leaking Underground Storage Tanks	STATE
STATE LANDFILL	Permitted solid waste landfills (active, inactive and closed), incinerators or transfer stations	STATE
CA WDS	Waste Discharge System	STATE
SWF/LF	Active, closed and inactive landfills	STATE
WMUDS/SWAT	Waste management units	STATE
DEED	Sites with deed restrictions	STATE
CORTESE	State index of properties with hazardous waste	STATE
TOXIC PITS	Toxic pits cleanup facilities	STATE
CHMIRS	Reported hazardous material incidents	STATE
NOTIFY 65	Reported releases that could impact drinking water	STATE
HAZNET	Facilities that generate hazardous waste	STATE
UST/AST	Registered underground and aboveground storage tanks	STATE/COUNTY

AWP: Annual Workplan Sites
 CALSITES: California Department of Toxic Substances Control Database of Hazardous Substances Releases
 CERCLIS: Comprehensive Environmental Response, Compensation & Liability Information System
 CHMIRS: California Hazardous Material Incident Report System
 CORRACTS: Corrective Action Report System, an EPA database of corrective actions taken at a RCRA Regulated site.
 CORTESE: Based on input from 14 state databases
 DEED: List of Deed Restrictions
 HAZNET: Hazardous Waste Information System
 MLTS: Material Licensing Tracking System
 NFRAP: No Further Remedial Action Planned (archived CERCLIS sites)
 NOTIFY 65: Proposition 65 Records
 PADS: PCB Activity Database System
 RCRA: Resource Conservation and Recovery Act
 SWF/LF: Solid Waste Information System
 TRIS/TSCA: Toxic Chemical Release Inventory System/Toxic Substances Control Act
 WMUDS/SWAT: Waste Management Database

SOURCE: EDR (2005)

**TABLE 2.7-2
HAZARDOUS MATERIALS RELEASE SITES ADJACENT TO THE
TRANSMISSION LINE ALIGNMENT AND SUBSTATIONS**

Site ID (see Figure 2.7-1)	Site Name	Site Address	Direction from Project ^a	Regulatory Lists	Status
1	Time Oil Jackpot	20820 Broadway	1 – 2 miles SE (downgradient ^b)	Cortese, LUST	Case Closed
2	Four Corners Service	20500 Broadway	Less than 1,000 feet NE (downgradient)	Cortese, LUST	Preliminary Site Assessment Underway
3	Daniel Auto Repair	20501 Broadway	Less than 1,000 feet SE (downgradient)	Cortese, LUST	Remedial Action Underway
4	Jacoboni Property	370 Napa Road	1 – 2 miles E (downgradient)	Cortese, LUST	Case Closed

- a The EDR report included distances and directions which were determined to be slightly inaccurate upon visual inspection of aerial photography, probably due to the fact that the project is a linear corridor extending over seven miles. This column provides accurate representation of actual site location in relation to closest point of the project alignment.
- b A term used to describe where a property is located in relation to another property based on the flow of groundwater. For example, if the groundwater flow direction is to the south, and Property A is located to the north of Property B, property B is located downgradient of Property A, and therefore, contamination of Property A could contaminate Property B.

SOURCE: EDR (2005)

The database search identified other sites in addition to the sites of potential concern listed in **Table 2.7-1**. These other sites listed on the EDR database search include hazardous material/waste storage, generation and treatment facilities; underground storage tank (UST) locations; aboveground storage tank (AST) locations; dry cleaning facilities; sites that have waste discharge requirements; pesticide-producing facilities; and facilities with air emissions. These facilities are not considered to be a concern for the Proposed Project because they have not been listed as having experienced any releases or contamination. These facilities operate under permits with specific requirements in accordance with applicable laws and regulations, and are typically inspected on a regular basis by the regulating agency(ies).

The sites identified in **Table 2.7-2** are described below.

Site 1 - 20820 Broadway, Time Oil Jackpot

In October 1988, one 4,000-gallon and one 12,000-gallon gasoline UST were removed from this site, located approximately 7,848 feet southeast from the Proposed Project alignment. A 500-gallon waste oil UST was removed at the same time. The site is estimated to be approximately 48-feet lower in elevation than the project site. Four hundred cubic yards of soil were removed from the excavation and stockpiled on site to remove any soil which may have been contaminated by the three tanks removed. Six hundred gallons of water were pumped out of the excavation to extract any localized groundwater contamination. MTBE was initially detected in the excavated material. Laboratory tests indicated high chromium levels in the groundwater, reportedly due to a local rock formation rich in chromium rather than from leaking tanks. According to site records reviewed by ESA, this case is now closed (EDR, 2005). The likelihood of any contaminated soil or groundwater being encountered during project construction is very low due to distance,



SOURCES: EDR (2005) and EDAW (2004)

Lakeville-Sonoma 115 kV Transmission Line Project / 204202 ■

Figure 2.7-1
Hazardous Material Release Sites

elevation, era of the incident, and determination by the San Francisco Regional Water Quality Control Board (RWQCB) to close the case in 1996.

Site 2 – 20500 Broadway, Four Corners Service

In March 2001, two 5,000-gallon and one 10,000-gallon gasoline UST were removed from this site, located approximately 500 feet northeast of the Proposed Project alignment. The site is estimated to be 56 feet in elevation below the project site. In addition, one 2,000-gallon diesel and a 250-gallon waste oil UST were removed from the site. An area of 1,140 square feet of soil was excavated to depths between 9.5 and 15 feet. Soil was initially stockpiled and used to backfill the waste oil tank excavation pit. In July 2002, over excavation work began at the locations of the former diesel and gasoline UST. Additional work was conducted to remove soil that had been used to backfill the original waste oil UST excavation. MTBE was detected in the soil and groundwater. In August 2002, excavations were backfilled using pea gravel. Approximately 1,000 cubic yards of soil were excavated and sent to Forward Landfill. Groundwater removed from the excavation totaled 18,000 gallons. According to California Environmental Protection Agency (Cal EPA) site records, a Preliminary Site Assessment by the RWQCB has been underway since 1997; however, the case for this site has not yet been closed (EDR, 2005). Due to the project area's distance from this site, its higher elevation in relation to this site, and its limited excavation volume, there is little risk of public or environmental hazard as a result of project construction activities.

Site 3 – 20501 Broadway, Daniel Auto Repair

In May 1986, four 1,000-gallon gasoline USTs were removed from this site, located about 500 feet southeast of the project site. Soil and groundwater removed from the excavation was tested and MTBE was detected to be present at a maximum level of 9.5 parts per billion (ppb). In June 1986, 2,100 cubic yards of soil were excavated in the vicinity of the former USTs. A preliminary site assessment was prepared in 1992. In March 2001, additional excavation work was conducted pursuant to a remedial action plan. Remedial action remains underway at the site (EDR, 2005). Since the site is undergoing remedial action overseen by the San Francisco Bay RWQCB, there is little risk of public or environmental hazard as a result of project construction activities.

Site 4 – 370 Napa Road, Jacoboni Property

In 1989, a gasoline UST was excavated and removed from this site. It is located over one mile east of the project site. In 1990, MTBE was detected and contaminated soil was excavated and removed. In 2002, this case was closed by San Francisco Bay RWQCB (EDR, 2005). Since the case has been closed and the site is over one mile from and downgradient of the Proposed Project, there is little risk of public or environmental hazard as a result of project construction activities.

Wood Treatment Products

The existing transmission line poles are treated with chemicals that include pentachlorophenol, creosote, and chromated copper arsenate. These treatment chemicals are used in pressure treated wood to protect wood from rotting due to insects and microbial agents. These chemicals, for certain uses and quantities, can be considered to be hazardous materials, which require specific

handling procedures prescribed by state and federal regulations. These chemicals are applied to wood transmission line poles by the manufacturer at their facility and are let to set and dry prior to installation and/or use of the wood. At the time of installation, the wood treatment is soaked into the wood and is dry. Because the chemicals have dried and because the poles are placed in concrete footing, there is negligible leaching out of the wood and into the environment.

Additionally, the base of the treated wood poles at the project site could be wrapped with copper naphthenate paper. This paper has been accepted as a wood preservative for several decades and has been employed in nonpressure treatments of wood and other products. Copper naphthenate is a common preservative and its use has increased recently in response to environmental concerns associated with other wood treatment products.

Wildland Fire Conditions

The combination of highly flammable fuel, long dry summers and steep slopes creates a significant natural hazard of wildland fires in many areas of Sonoma County. Wildland fires can result in death, injury, economic losses and a large public investment in fire fighting efforts. Woodlands and other natural vegetation can be destroyed resulting in the loss of timber, wildlife habitat, scenic quality and recreation. Soil erosion, sedimentation of fisheries and reservoirs, and downstream flooding can also result.

Most damage results from a few large fires in the dry weather months. Fire hazard severity has been mapped by the California Department of Forestry (CDF). Areas with a high or very high risk include over half of Sonoma County. The highest hazard is found in mountainous areas with dry summers, plenty of fuel, and steep slopes, such as the project area (Sonoma County PRMD, 1989).

2.7.2 Regulatory Context

Table 2.7-3 provides a brief overview of federal and state laws and regulations.

State

Soil Contamination

Soils having concentrations of contaminants higher than certain acceptable levels must be handled and disposed as hazardous waste when excavated. The California Code of Regulations, Title 22, Section 66261.20-24 contains technical descriptions of characteristics that would classify a soil as a hazardous waste.

Hazardous Materials Management

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires that businesses handling hazardous materials prepare a business plan. In January 1996, Cal EPA adopted regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The program has

**TABLE 2.7-3
 FEDERAL AND STATE LAWS AND REGULATIONS REGARDING HAZARDOUS MATERIALS**

Hazardous Materials Management	State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. These laws require hazardous materials users to prepare written plans, such as Hazard Communication Plans, Hazardous Materials Business Plans, and Chemical Hygiene Plans. Laws and regulations require hazardous materials users to store these materials appropriately and to train employees to manage them safely. A number of agencies participate in enforcing hazardous materials management requirements.
Hazardous Waste Handling	The California Department of Toxic Substances Control (DTSC) regulates the generation, transportation, treatment, storage, and disposal of hazardous material waste. These laws impose "cradle-to-grave" regulatory systems that require generators of hazardous materials waste to handle it in a manner that protects human health and the environment to the extent possible. The DTSC permits and oversees hazardous materials waste treatment, long-term storage, and disposal facilities.
Hazardous Materials Transportation	The U.S. Department of Transportation (U.S. DOT) regulates the transportation of hazardous materials between states. Within California, the state agencies with primary responsibility for enforcing federal and state regulations, and for responding to transportation emergencies, are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications. Although special requirements apply to transporting hazardous materials, requirements for transporting hazardous waste are more stringent, and hazardous waste haulers must be licensed to transport hazardous waste on public roads.
Soil and Groundwater Contamination	The Comprehensive Environmental Response, Compensation, and Liability Act and associated Superfund Amendments provide the U.S. EPA with the authority to identify hazardous sites, to require site remediation, and to recover the costs of site remediation from polluters. California has enacted similar laws intended to supplement the federal program. The DTSC is primarily responsible for implementing California's Superfund Law.
Emergency Response	California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services (OES), which coordinates the responses of other agencies, including Cal EPA, CHP, the Department of Fish and Game (DFG), the RWQCB, and the local fire department.

six elements: hazardous waste generators and hazardous waste on-site treatment; USTs; ASTs; hazardous materials release response plans and inventories; risk management and prevention programs; and Unified Fire Code hazardous materials management plans and inventories. The plan is implemented at the local level, and the agency responsible for the implementation of the Unified Program is called the Certified Unified Program Agency (CUPA). In Sonoma, Sonoma County Department of Emergency Services Hazardous Materials Division is the designated CUPA.

Hazardous Waste Management and Handling

Under the Resource Conservation and Recovery Act (RCRA), individual states may implement their own hazardous waste programs in lieu of RCRA as long as the state program is at least as stringent as federal RCRA requirements. The U.S. EPA must approve state programs intended to implement federal regulations. In California, Cal EPA and DTSC, a department within Cal EPA, regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. The U.S. EPA approved California's RCRA program, called the Hazardous Waste Control Law (HWCL), in 1992. DTSC has primary hazardous material regulatory responsibility, but can delegate enforcement responsibilities to local jurisdictions that enter into agreements with DTSC

for the generation, transport, and disposal of hazardous materials under the authority of the HWCL.

The hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe the management of hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in ordinary landfills. Hazardous waste manifests must be retained by the generator for a minimum of three years. Hazardous waste manifests provide a description of the waste, its intended destination, and regulatory information about the waste. A copy of each manifest must be filed with the state. The generator must match copies of hazardous waste manifests with receipts from treatment, storage, and disposal facilities.

Contaminated soils and other hazardous materials removed from a site during construction or remediation may need to be handled as hazardous waste. In Sonoma County, remediation of contaminated sites is performed under the oversight and with the cooperation of Sonoma County Local Oversight Program and RWQCB.

Hazardous Materials Transportation

The State of California has adopted U.S. DOT regulations for the intrastate movement of hazardous materials; state regulations are contained in 26 CCR. In addition, the State of California regulates the transportation of hazardous waste originating in the state and passing through the state (26 CCR). Both regulatory programs apply in California.

The two state agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the CHP and Caltrans. The CHP enforces hazardous material and hazardous waste labeling and packing regulations to prevent leakage and spills of material in transit and to provide detailed information to cleanup crews in the event of an accident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are the responsibility of the CHP, which conducts regular inspections of licensed transporters to assure regulatory compliance. Caltrans has emergency chemical spill identification teams at as many as 72 locations throughout the state that can respond quickly in the event of a spill.

Common carriers are licensed by the CHP, pursuant to California Vehicle Code Section 32000. This section requires the licensing of every motor (common) carrier who transports, for a fee, in excess of 500 pounds of hazardous materials at one time, and every carrier, if not for hire, who carries more than 1,000 pounds of hazardous material of the type requiring placards.

Every hazardous waste package type used by a hazardous materials shipper must undergo tests that imitate some of the possible rigors of travel. Every package is not put through every test. However, most packages must be able to be kept under running water for a time without leaking; dropped, fully loaded, onto a concrete floor; compressed from both sides for a period of time; subjected to low and high pressure; and frozen and heated alternately.

Hazardous Materials Emergency Response

Pursuant to the Emergency Services Act, California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local governmental agencies and private persons. Response to hazardous materials incidents is one part of this plan. The plan is administered by the state OES. The OES coordinates the responses of other agencies, including the U.S. EPA, CHP, DFG, the RWQCBs, the local air pollution control districts (in this case, the Bay Area Air Quality Management District (BAAQMD)), and local agencies.

Pursuant to the Business Plan Law, local agencies are required to develop “area plans” to response to releases of hazardous materials and wastes. These emergency response plans depend to a large extent on the Business Plans submitted by people who handle hazardous materials. An area plan must include pre-emergency planning and procedures for emergency response, notification, and coordination of affected governmental agencies and responsible parties, training, and follow up. As described above under above, the Sonoma County designated CUPA, is responsible for implementing the Unified Program which includes provisions for the implementation of hazardous materials release response plans.

Local

Bay Area Air Quality Management District

BAAQMD is responsible for regulating and enforcing air quality standards in the project area. With regard to hazardous substance releases, the BAAQMD can impose specific requirements on remediation and other activities to protect ambient air quality from dust or other airborne contaminants. According to BAAQMD regulations, soils having concentrations of contaminants higher than certain acceptable levels must be handled and disposed as hazardous waste when excavated. Title 22 CCR Section 66261.20-24 contains technical descriptions of characteristics that would cause a soil to be classified as a hazardous waste.

Sonoma County Local Oversight Program

The Sonoma County Local Oversight Program (LOP) oversees the investigation and cleanup of fuel releases from USTs in all areas of the county, with the exception of the Cities of Santa Rosa and Healdsburg. Sites are entered into the LOP when a release from an underground tank is reported, which typically happens when an underground tank is removed, and signs of a release are either obvious or reported in laboratory sample results. Releases are also reported when contamination is found while repairing fuel delivery systems, or when Phase II environmental site assessments are performed at the time of property sales. Once entered into the LOP, the site must be investigated and cleaned up in accordance with the California Underground Storage Tank Regulations, Sonoma County Program Guidelines for Site Investigations, and RWQCB water quality objectives.

Sonoma County Department of Emergency Services

The Emergency Management Division of the Department of Emergency Services (DES) is responsible for the planning, coordination of response, recovery, and mitigation activities related

to countywide emergencies and disasters. The DES is the lead agency for the Sonoma Operational Area and serves as the primary coordination point for emergency management's communication between federal, state, and local levels. DES develops emergency operation plans for the county, cities, and districts; conduct training and educational outreach programs related to emergency preparedness; and sponsor emergency management training. The local representative of the DES in the project area is the Sonoma Fire Department. Fire Stations #1 and #2 are located at 630 2nd Street West and 877 Center Street, respectively.

Sonoma County General Plan

The Sonoma County General Plan Safety Element contains the following goals, objectives, and policies related to hazardous materials and wildland fires that would be applicable to the Proposed Project:

- Goal PS-3.1: Prevent unnecessary exposure of people and property to risks of damage or injury from wildland and structural fires.
- Policy PS-3b: Consider the severity of natural fire hazards, potential damage from wildland and structural fires, adequacy of fire protection and mitigation measures consistent with this element in the review of projects.
- Policy PS-3g: Encourage strong enforcement of state requirements for fire safety by the California Department of Forestry.
- Policy PS-3h: Encourage continued operation of CDF programs for fuel breaks, brush management, controlled burning, revegetation and fire roads.
- Goal PS-4: Prevent unnecessary exposure of people and property to risks of damage or injury from hazardous materials.
- Objective PS-4.2: Regulate the transport, storage, use and disposal of hazardous materials in order to reduce the risks of damage and injury from hazardous materials to acceptable levels.
- Policy PS-4d: Where allowed by law, regulate the transportation of hazardous materials to minimize the potential for damage. Seek regulation by other agencies consistent with adopted County policies. (Sonoma County PRMD, 1989)

City of Sonoma General Plan

The City of Sonoma General Plan Public Safety Element contains the following goals and policies related to hazardous materials and wildland fires that would be applicable to the Proposed Project:

- Goal PSE-2: Minimize hazards posed by fires, hazardous materials, and medical incidents and maintain a level of protection which safeguards life and property at a reasonable cost.

- Goal PSE-4: Ensure that essential emergency and public services will function effectively in a disaster.
- Policy 16: The City shall use the Standardized Emergency Management System as the basis of its emergency planning.
- Policy 18: The City shall continue to promote awareness of the Emergency Plan and its recommendations.
- Policy 19: The City shall continue to coordinate its emergency planning efforts with other relevant jurisdictions, agencies, and groups. (City of Sonoma, 1995)

2.7.3 Hazards and Hazardous Materials Impacts and Mitigation Measures

- a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials: *less than significant with mitigation incorporated.***

Proposed Project

During project construction (installation of the new transmission line and modifications to the substations) activities, limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, paints, etc. would be used for vehicles and motorized equipment. Accidental spill of any of these substances could impact water and/or groundwater quality. Liquid concrete would also be utilized for utility pole foundation construction, and accidental release of this material could wash into nearby waterways or infiltrate the soil. Temporary bulk above-ground storage tanks and 55-gallon drums may also be used for fueling and maintenance purposes. As with any liquid, during handling and transfer from one container to another, the potential for an accidental release exists. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose a hazard to construction workers, the public, as well as the environment. While the project would not require long-term operational use, storage, treatment, disposal, or transport of significant quantities of hazardous materials, hazardous materials would be used during project construction activities.

Impact 2.7-1: Construction activities would require the use of certain materials such as fuels, oils, solvents, and other chemical products that, in large quantities, could pose a potential hazard to the public or the environment if improperly used or inadvertently released. This would be a less than significant impact with implementation of Mitigation Measures 2.7-1a through 2.7-1e.

Mitigation Measure 2.7-1a: PG&E and/or its contractor(s) shall implement construction best management practices including but not limited to the following:

- Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction;
- Avoid overtopping construction equipment fuel gas tanks;
- During routine maintenance of construction equipment, properly contain and remove grease and oils; and
- Properly dispose of discarded containers of fuels and other chemicals.

Mitigation Measure 2.7-1b: *Hazardous Substance Control and Emergency Response Plan* – PG&E shall prepare a Hazardous Substance Control and Emergency Response Plan (the Plan) for the project and implement it during construction. The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include a discussion of appropriate response actions in the event that hazardous materials are released or encountered during excavation activities.

Mitigation Measure 2.7-1c: *Health and Safety Plan* – PG&E shall prepare and implement a Health and Safety Plan to ensure the health and safety of construction workers and the public during project construction. The plan shall include information on the appropriate personal protective equipment to be used during construction.

Mitigation Measure 2.7-1d: *Worker Environmental Awareness Program (WEAP)* – PG&E shall ensure that an environmental training program is established and delivered to communicate environmental concerns and appropriate work practices to all construction field personnel. The training program shall emphasize site-specific physical conditions to improve hazard prevention, and shall include a review of the Health and Safety Plan and the Hazardous Substance Control and Emergency Response Plan. PG&E shall submit documentation to the CPUC mitigation monitor that each worker on the project has undergone this training program.

Mitigation Measure 2.7-1e: *Emergency Spill Supplies and Equipment* – PG&E shall ensure that oil-absorbent material, tarps, and storage drums shall be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept adjacent to all areas of work, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the project's Hazardous Substance Control and Emergency Response Plan, which shall be implemented during construction.

Significance after Mitigation: Less than Significant.

Mitigation Measure 2.1-1

As a result of the Land Use analyses (Section 2.1), Mitigation Measure 2.1-1 would require the new 115 kV single-circuit transmission line to be undergrounded beneath Leveroni Road from approximately Fifth Street West to the Sonoma Substation (see

Figure 2.1-4). The underground portion of the transmission line would be about 1/2 mile in length.

Implementation of this mitigation measure would not add or increase any environmental impacts from those discussed above.

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment: *less than significant impact.***

Proposed Project

It is not anticipated that construction or operation of the Proposed Project would create a significant hazard to the public due to upset or accident conditions involving the release of hazardous materials into the environment. Accidental release of hazardous materials routinely used during construction activities are addressed in section a), above.

Implementation of the project would not involve significant grading or excavation and therefore the release of previously unidentified hazardous materials in urban, open space, or agricultural areas is low.

Additionally, PG&E has procedures in place to control its construction work activities in contaminated areas. Before or during the detailed design phase of a project, PG&E generally performs subsurface soil sampling at intervals along the entire project alignment, and especially in areas of known potential contamination to identify areas that contain contaminated soils. PG&E extracts and test samples of soil and groundwater to identify types and concentrations of contaminants. The design-phase sampling program helps identify health hazards that may be encountered during construction, and is used to develop appropriate construction practices and procedures as a part of a Health and Safety Plan and Hazardous Substance Control and Emergency Response Plan. These plans are developed to ensure worker safety as well as to reduce the potential for discharges of pollutants from the contaminated soils. All soil and groundwater sampling follows proper testing and handling protocols for hazardous waste and water collection and decontamination procedures.

In addition to the pre-project soil and groundwater testing, PG&E incorporates standard procedures for work in contaminated soils into project construction methods. These procedures are incorporated to ensure worker safety as well as protect the environment during construction in contaminated areas. Specific construction procedures are developed after identifying contaminants in a project area and may include a Worker Training Program, use of personal protective equipment and clothing, containment and testing of potentially contaminated soils and water, and use of a qualified observer, as well as implementing construction best management practices to prevent accidental transport of contaminants outside the construction area.

Treated wood poles from the project would either be reused or disposed as waste pursuant to PG&E's Treated Wood Protocol (see **Appendix F**). If the wood is reused, then PG&E would provide the recipient with a letter of agreement stating that the recipient will use the wood for specified purposes and a warning statement indicating that the wood contains preservative chemicals. In addition, each reused pole would have an adequate warning statement affixed to it describing the wood treatment material on the pole. If the poles are not reusable, then the poles would be disposed of as non-hazardous waste at a landfill that is under contract to PG&E and is permitted by the State of California to accept it. While it is not required by law, PG&E's protocol for wood pole disposal recommends the use of a non-hazardous waste manifest when shipping treated wood to a landfill to help track the quantity of treated wood sent for disposal.

Treated wood poles would be transported from the field to a consolidation site. However, if treated wood is temporarily left unattended at a job site that is accessible to the public, each piece of wood must have the treated wood warning statement affixed to it.

Treated wood poles are wrapped around the base with copper naphthenate paper. The following requirements would apply if naphthenate paper is found at the base of the poles:

- If the paper is in good condition and is securely attached to the poles, the poles may be transported from the field to a consolidation site with the paper intact.
- If the paper is in poor condition and there is the possibility that it will tear off during transport, remove the paper in the field before transporting. If the amount of copper naphthenate paper removed in the field is > 10 lb, it must be bagged, labeled as hazardous waste, and transported to a PG&E consolidation site using a appropriate hazardous materials documentation. (If < 10 lb. of copper naphthenate paper is shipped, a log describing the waste must be kept at the consolidation site).
- PG&E would remove the paper from the poles prior to reuse or disposal.
- PG&E would manage the paper as hazardous waste.

The protocol for disposal of treated poles was developed to protect site workers and would be followed during removal and disposal of the wood poles. As part of PG&E's Hazard Communication training, and as part of its training in specific work practices, information about the hazards and proper handling practices would be communicated to all employees and/or contractors that would handle treated wood. The poles would be reused or disposed of as nonhazardous waste and any naphthenate paper would be handled in accordance with hazardous materials regulations. Therefore, impacts related to the removal and disposal of treated wood would be less than significant.

Mitigation Measure 2.1-1

Implementation of Mitigation Measure 2.1-1 would involve excavation of a trench and installation of a 1/2-mile underground transmission cable. While no hazardous material sites have been identified along the proposed route, there is the potential that unidentified contamination areas could be encountered.

Encountering contaminated soil, surface water, and groundwater without taking proper precautions could result in the exposure of construction workers and the environment to hazardous conditions. The potential for encountering contaminated soil and groundwater could come from sites located adjacent to and within the vicinity of the Proposed Project where the underground transmission line would be installed that have experienced a release of hazardous materials or petroleum products. PG&E maintains specific protocols for subsurface soil sampling and testing for contaminated soils during construction activities. Implementation of these protocols would ensure that any hazardous materials encountered during construction would be handled in an appropriate and safe manner and that these activities would not create a significant hazard to the public or the environment due to upset or accidental release.

- c) **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school: *less than significant impact.***

There are no existing or proposed schools within 1/4 mile of the transmission line alignment. A small church school on Highway 12, south of Leveroni / Napa Road, is located about 0.20 miles southeast of the Sonoma Substation, the eastern extent of the project. Sonoma Valley High School is located about one-half mile northeast of the Sonoma Substation. Since significant quantities of hazardous materials would not be used during construction and because there are no schools located within 1/4 mile of the project, there is a very low potential for the project to result in any significant impact to nearby schools.

- d) **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment: *less than significant impact.***

According to the EDR report (EDR, 2005), the Proposed Project would not be located on a site with known hazardous materials contamination. If contaminated materials are encountered during project construction activities, implementation of Mitigation Measures 2.7-1b through 2.7-1e would reduce these impacts to a less than significant level.

- e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area: *no impacts.***

There are no public airports located within 2 miles of the project area. The Proposed Project would involve the installation of transmission line and modifications to existing substations. There would be no structures of significant height that would impair airport operations. Therefore, there would be no airport safety hazards associated with project construction or operation.

- f) **For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area: *no impacts*.**

There are no known private airports located within 2 miles of the project area. Accordingly, there should be no airport safety hazards associated with project construction or operation. The use of helicopters for project installation in remote areas is addressed in Section 2.17, *Transportation and Traffic*.

- g) **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan: *less than significant impact*.**

Proposed Project

The Proposed Project would involve the operation of heavy machinery during installation activities, and emergency response times along Leveroni Road may be impacted for a short period of time. Neither Sonoma County nor the City of Sonoma has designated Leveroni Road as an emergency evacuation route (Helgren, 2005 and Cahill, 2005). Sonoma County has designated evacuation routes for areas subject to inundation from dam breaks only, and Leveroni Road is not designated as such. Other emergencies (earthquake, fire, etc.) requiring evacuation are handled on a per incident basis. This would be a less than significant impact with implementation of Mitigation Measure 2.13-2, discussed in the Section 2.13, *Public Services*.

Mitigation Measure 2.1-1

Implementation of Mitigation Measure 2.1-1, which requires a portion of the transmission line to be undergrounded from approximately Fifth Street West to the Sonoma Substation, would result in an increase in construction time for the underground component of the transmission line along Leveroni Road, increasing emergency service response times as indicated above. This would be a less than significant impact with implementation of Mitigation Measure 2.13-2, discussed in Section 2.13, *Public Services*.

- h) **Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands: *less than significant impact*.**

The project could increase the risk of wildland fires in the area because induced current on the new transmission line could result in sparks that could reach trees and/or vegetation along the transmission line corridor that could result in fire. To minimize the risk of trees falling on the transmission line or other accidental ignition of a wildland fire

from the transmission line, PG&E would follow guidelines including CPUC General Order 95, Public Resources Code Section 4293, PG&E's Transmission Right of Way Vegetation Management Program and Transmission Routine Patrol Standard, and the International Society of Arboriculture's pruning guidelines and the ANSI A300 Pruning Standards.

The project site is located within an area of Sonoma County that consists mainly of agricultural land and open space. Wildland fire hazards exist in varying degrees over much of the County. The fire season extends approximately 5 to 6 months, from late spring to fall, and hazards arise from a combination of climatic, vegetative, and physiographic conditions. Grazing land and open space are more susceptible to wildland fires than irrigated agricultural land or vineyards.

While the project would place people (construction and/or maintenance workers) in an area highly susceptible to wildland fires, these individuals would only be in the area on a temporary basis during construction and an intermittent basis during project operation for maintenance activities and therefore, implementation of the Proposed Project would not result in a significant risk of loss, injury, or death involving wildland fires.

References – Hazards and Hazardous Materials

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